

MEMORANDUM

TO: Robert Haynes

THROUGH: John B. Blevins

Ali Mirzakhali, P.E.

Robert J. Taggart

FROM: Ravi Rangan, P.E.

SUBJECT: **Second Response Document Developed by the Air Quality Management (AQM) Section for the Public Hearing Held on August 18, 2004 for the Title V – Part 3 Draft Permit for The Premcor Refining Group, Inc.**

DATE: December 17, 2004

A public hearing was held on August 18th, 2004 to receive comment on The Premcor Refining Group, Inc.'s (Premcor's) Title V – Part 3 draft permit. The Air Quality Management (AQM) Section of the Department of Natural Resources and Environmental Control submitted its first response document on September 24, 2004. On September 8, 2004, the Secretary granted the public's request for an additional comment period that began on October 1, 2004 and ended on October 22, 2004. During this second comment period, the only additional comments received by the Department were all made by Premcor. Therefore, this second response document provides AQM's responses to only those comments. In addition, AQM is submitting a proposed Title V -Part 3 permit with a supporting review memorandum.

Part 3 of Premcor's Title V application addresses the company's power plant and repowering project, located at the Delaware City Refinery and includes the gasifiers, combustion turbines, a flare, power plant boilers, a cooling tower and other components.

Your patience in awaiting receipt of these responses is appreciated. I hope this information will assist you in reviewing the issues and making your recommendation to the Secretary.

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pc: Dover Title V File
Bruce A. Steltzer
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**Responses to Public Comments
(Supplement)**

**Title V (Part 3) Operating Permit
Delaware City Power Plant / Premcor Refinery**

December 2004

Prepared for

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1.0 Introduction

This document contains responses prepared by the Air Quality Management Section of the Department of Natural Resources and Environmental Control (DNREC). These responses correspond to the comments received on the Draft Title V (Part 3) Operating Permit for the Delaware City Power Plant at the Premcor Refinery located at 4550 Wrangle Hill Road, Delaware City, Delaware 19706. The comments to which DNREC is responding in this document were received from the Premcor Refinery during the second public comment period of October 1, 2004 through October 22, 2004 for this permit. No other comments were received from any party during the second public comment period.

Note that the first public comment period for this permit concluded on June 11, 2004. A public hearing was held for this permit on August 18, 2004. In September 2004, DNREC had prepared responses to all comments received during the first comment period and during the public hearing. Those responses were made available to the public during the second comment period. The responses presented in this document have been prepared as a supplement to the earlier responses prepared by DNREC in September 2004.

2.0 Comments from Premcor

2.1 Department Responses to General Comments from Premcor

Comment: Comment 3: Condition 5 Compliance Schedule.

Premcor's Response: The Department states that the AQM-1001Z forms submitted by Premcor are either not valid or incomplete. Premcor respectfully disagrees. The Department has acknowledged that only one test run showed compliance and the remainder showed "*marginal non-compliance*" for PM-10. The Department offers no factual support for its position. Premcor believes that remedies for this "*marginal non-compliance*" may be more problematic than the Department anticipates, and that a compliance schedule would allow Premcor time to resolve any non-compliance issues in an efficient and timely manner. Premcor submitted a proposed compliance schedule in its permit application, and understands that the Department disagrees with certain details of that compliance schedule. Premcor wishes to work with the Department to reach agreement on a satisfactory schedule and provide further detail as necessary to resolve the "*marginal non-compliance*" issue that exists with respect to Boiler 1 and Boiler 3. Compliance testing for Boiler 2 will be provided to the Department when available.

DNREC Response: This comment pertains to the forms AQM-1001Z submitted with Revision 8 of the Title V permit application in February 2004 presenting the proposed compliance plans for Boilers 1, 2 and 3. The facility had requested that a compliance plan be included in the permit. It should be noted that no details were provided in the AQM-1001Z forms submitted by the facility with the exception of a requested compliance date of December 30, 2006 and that the facility will apply for a change in the permitted emission standard. Currently, DNREC does not intend to entertain a request for a change in the permitted PM-10 emission standard of 0.005 lb/MMBtu when burning gaseous fuel. This limit was issued in a Regulation 2 permit and DNREC believes that it can be achieved by means of minor adjustments in operating parameters and by implementing good engineering operating practices to minimize emissions. In its previous response in September 2004, DNREC had presented factual stack test data to support its claim that the Boilers 1 and 3 only showed marginal non-compliance. If Premcor believes that this emission limit cannot be met, then Premcor should come forward with the exact nature of the problem and a specific detailed plan to address that problem along with a timeline for all intermediate steps necessary to achieve compliance. Premcor has not provided such detailed information to DNREC which is necessary to support a compliance plan even though Premcor has been aware of this marginal non-compliance for more than a year. If all Premcor intends to do is request a change in the permitted emission standard, then DNREC questions the need for a compliance achievement date of December 30, 2006, which is more than two years from the date of this response-to-comments document. Based on the information currently available, DNREC does not intend to release Premcor from its obligation to comply with this limit and disagrees that a compliance plan for these boilers should be included in the permit. It is DNREC's position

that any non-compliance with this limit would be better handled in an enforcement context rather than a permitting context.

Comment: Comment 4: Merging of the Quarterly Reporting and the Semiannual Deviation Reporting Requirements

Premcor's Response: The Department rejects Premcor's request to simplify the reporting requirements by changing from quarterly reporting to semi-annual reporting and to simplify these reports by allowing Premcor to maintain a file of the raw data and logbooks in situ instead of routinely submitting copies to the Department.

Premcor respectfully asks the Department to reconsider its requirement for quarterly reporting because Title V requires only semi-annual reporting, and because there have not been a significant number of non-compliance events to warrant quarterly reporting frequency.

The Department also expresses the view that because the repowering plant is operating sporadically, copies of operating and instrument logbooks can help demonstrate overall compliance. Premcor disagrees. Raw data and logbooks are kept at the operating unit and can be easily provided for review upon request, thereby avoiding unnecessary time and expense, both in assembling and copying the documents, and in the Department's review of those documents. Moreover, raw, unqualified (non-QA), data provides no additional information demonstrating either compliance or non-compliance. The Department has provided no evidence that this unduly burdensome requirement will produce any meaningful benefit, and in the interest of reducing paperwork, energy, and storage requirements for these documents and data, Premcor asks the Department to reconsider the need for handwritten and unqualified information.

DNREC Response: DNREC reiterates its earlier response prepared in September 2004. The quarterly reports have enabled DNREC to maintain an up to date status of the repowering project. This reporting condition will not increase the reporting requirements under existing permits. Furthermore, DNREC believes that each of these reports, and the associated data collection and documentation, serve a unique purpose in the overall demonstration of continued compliance with the permit terms and conditions, and are therefore essential elements of the Title V permit. DNREC does not intend to change the reporting or the data collection requirements of the permit.

Comment: Comment 5: Permit Shield

Premcor's Response: Premcor is gratified to know that the Department is not opposed to providing a Permit shield. Nevertheless, since the Department has chosen to issue Premcor a segmented Title V permit, withholding the permit shield until all three parts of the permit are issued puts Premcor at unnecessary risk within the regulated community in Delaware, and treats Premcor less favorably than all other facilities that received their entire Title V permit in one piece. The Department has not explained why it is not feasible to issue a permit shield for this part of the Title V permit. Premcor is willing to work with the Department to identify information already provided, or provide additional information, to allow Premcor to obtain a permit shield for this part of the Title V permit in a timely manner.

DNREC Response: DNREC reiterates that it is not opposed to providing a permit shield for the facility's Title V permit. However, as mentioned in DNREC's earlier response, the Title V permit for this facility is being issued in three parts (owing to the complexity of this facility) and therefore it is not feasible to include a permit shield at the present time. It should be noted that Motiva (Premcor's predecessor) had supported the issuance of this permit in three parts and had raised no such objections when the Part 1 of the permit was issued in 2001. While DNREC is currently denying a permit shield, it is envisioned that when all parts of the permit have been completed and the permit is combined into a single permit document, a permit shield would then be feasible. At such time, DNREC will be in a position to consider an application by the facility to grant a permit shield.

2.2 Department Responses to Specific Comments from Premcor

Comment: Comment 2: Design Capacity Limits in the Draft Permit

Premcor's Response: Premcor disagrees with the Department's decision to include the design capacity of Boiler 4 as a Title V permit condition. No existing Premcor permit contains such a design capacity permit. Moreover, Title V reads, in part, "The operating permit regulations do not provide for the establishment of any new substantive control requirements." Reg. 30, Section 1. Thus, Title V does not authorize the Department to apply design capacity as a new limit in the Title V permitting process, especially after the conclusion of the public hearing.

DNREC Response: DNREC has further evaluated the need to include design capacities of boilers in the permit. Section 1.5 of Regulation 2 clearly states that "Any approval granted by the Department pursuant to this Regulation, and any exemption from the requirements of this Regulation provided for in Section 2.2 shall not relieve an owner or operator of the responsibility of complying with applicable local, State, and Federal laws and regulations." Section 11.8(c) of Regulation 2 is applicable to the facility and requires that any unit's emission limit does not exceed that unit's potential to emit. Given that the Regulation 2 permit for Boiler 4 does not specify any numerical emission limits, the only mechanism by which the emissions of this boiler

can be quantified is by using its design capacity, in terms of MMBtu/hr, together with data on fuel use and hours of operation. Based on this regulatory requirement to specify the unit's potential to emit, and DNREC's concurrence with the comments received from the Mid-Atlantic Environmental Law Center, the Sierra Club and Green Delaware on the draft permit, DNREC believes the inclusion of the design capacity is relevant and necessary for determining compliance.

With respect to the CCUs and Boilers 1, 2 and 3, DNREC is not specifying their design capacities as permit limits. Boiler 2 has unit-specific numerical emission limits in the permit that are based on its potential to emit and therefore there is no need to include design capacity as a limit for this boiler. For CCUs and Boilers 1 and 3, the facility is required to submit unit-specific rolling twelve (12) month emission limits by March 31, 2005 which should also eliminate the need to specify design capacities as permit limits. DNREC is currently awaiting receipt of these limits from the facility. However, if a complete permit application specifying these unit-specific emission limits is not received by March 31, 2005, DNREC reserves the right to impose design capacities as permit limits for CCUs and Boilers 1 and 3.

Comment: Comment 5: Condition 3.c.2.i [16]: Reporting

Premcor's Response: Premcor does not agree with the Department's position with respect to the date when Premcor's initial semi-annual monitoring report is due. The issue is not limited to the monitoring report alone, but includes requirements that Premcor create checklists and logs, and train operators for new tasks. As evidenced by this document, the final permit conditions are still changing and may not be finalized until the date of final issuance. Absent a reasonable period of time to prepare and perform these tasks after the permit is finalized, there is an unnecessary risk that Premcor may be unable comply with all existing and new requirements immediately upon issuing the permit. For these reasons, Premcor requests that the permit effective date be at least 60 days after the date it is issued so as to provide Premcor a reasonable amount of time to perform these essential tasks.

DNREC Response: DNREC reiterates its position discussed in the earlier response prepared in September 2004. This reporting requirement is not new to the facility. The draft Part 3 permit was made available to Premcor on May 7, 2004, i.e., more than six months ago. Furthermore, additional time will elapse before this permit will be issued as a final permit. DNREC believes that Premcor has had ample time to develop the reports required by Condition 3.c.2.i. in the draft Part 3 permit.

With respect to the effective date of the permit, DNREC does not agree with the request to delay the effective date of the permit by 60 days after issuance. There is no justification for this delay. The permit will be effective on the date it is issued as a final permit as has been the case with all the Title V permits DNREC has issued.

Comment: *Comment 10: Condition 3 Tbl 1.a.2.vi [22]*

Premcor's Response: Premcor disagrees for the reasons stated in its earlier comments, but has no further comment.

DNREC Response: DNREC does not agree that this requirement should be removed. It is important to recognize that the purpose of the consent decree (CD) was “to resolve potential compliance issues while simultaneously advancing the goals of the Clean Air Act and that projects undertaken pursuant to the CD are for the purpose of abating or controlling atmospheric pollution or contamination by removing, reducing or preventing the creation or emission of pollutants...” The CD does not sanction increases in emissions that could result from burning No. 6 fuel oil in the future. Allowing combustion of No. 6 fuel oil in the future would represent a regression that is contrary to the principles of the CD. Therefore, DNREC is mandating the CD requirements in the permit and fully expects Premcor to comply with these requirements. By doing so, the compliance dates become enforceable independent of the CD. This is necessary to ensure the timing of the emission reductions and to ensure that the reductions are permanent.

Comment: *Comment 11: Condition 3 Tbl 1.a.3.iii.a [23]*

Premcor's Response: Premcor disagrees for the reasons stated in its earlier comments, but has no further comment.

DNREC Response: DNREC reiterates its previous response, and does not agree that the CCUs and the duct burners should be removed from this paragraph.

Comment: *Comment 13: Condition 3 Tbl 1.c.1.i.B [37]: Add the phrase “during periods of process upset and malfunction” after the word “flaring” in line 4, per previous agreement with permit staff.*

Premcor's Response: Premcor agrees, provided the Department incorporates, and does not modify, the language Premcor proposed in its earlier comments.

DNREC Response: DNREC reiterates its previous response. The 800-hour limit only applies to flaring of clean syngas and not to raw syngas.

Comment: *Comment 17: Condition 3 Tbl 1.d.1.iii.D [42] and 3.d.1.ii.D and 3.d.1.iv.B [43]*

Premcor's Response: Premcor disagrees for the reasons stated in its earlier comments, but has no further comment.

DNREC Response: DNREC reiterates its previous response. The facility must submit a complete permit application requesting the removal of the H₂S monitoring requirement of 40 CFR 60 Subpart J (Section 60.104(a)(1)) along with the Administrator's concurrence with the court decision that this regulation is not applicable. Upon receipt of this application, DNREC will initiate an administrative amendment process to revise the permit.

DNREC also reiterates that the requirement to monitor the sulfur content of syngas cannot be removed because this is a Regulation 2 permit condition.

Comment: *Comment 19: Condition 3 Tbl 1.e.3.iv [54]*

Premcor's Response: The Department agrees with Premcor that visual opacity observations do not need to be made for sources that have a COMS. However, the Department asserts that if a COMS is disabled or not operating properly visual opacity observations are required. Premcor disagrees. The QA/QC for a COMS provides standards of operation and outage periods for maintenance and mechanical failure. These standards do not require visual opacity observations. Premcor objects to including additional monitoring requirements beyond those already required by existing regulations or existing COMS QA/QC procedures.

DNREC Response: The requirement to conduct visual opacity observations is a facility-wide requirement that cannot be removed from the permit. DNREC agrees that for sources that have stack opacity monitors (i.e., COMS) the data provided by the COMS satisfies the opacity requirements. It is not DNREC's intent to require additional Reference Method 9 visible emissions evaluations for normal COMS outages such as QA/QC and related maintenance work. However, non-availability of data for an extended period of time is not acceptable and will be addressed in accordance with DNREC's enforcement policy guidelines.

2.3 Department Responses to Comments from Mid-Atlantic Environmental Law Center (MAELC)/Sierra Club

Comment: *Comment 1: Compliance Schedule*

Premcor's Response: Premcor agrees with the Department's Response Document, and notes that only five of the listed malfunction events, one for opacity and four for NO_x and SO₂, involved the Power Plant facilities subject to the Draft Permit. Those events were temporary upsets or malfunctions, and not due to ongoing noncompliance. These temporary malfunction events were corrected and the unit was restored to normal operation.

DNREC Response: No response is necessary.

Comment: *Comment 3: Segmentation of the Title V Permit*

Premcor's Response: Premcor agrees with the Department's response, except as to the imposition of capacity limits, which were discussed above at Section 2.0, Comment 2.

DNREC Response: No response is necessary. DNREC has addressed the comment regarding design capacity limits in another response above.

Comment: *Comment 4: Capacity Limits in the Draft Permit*
Premcor's Response: See Section 2.0, Comment 2.

DNREC Response: No response is necessary. DNREC has addressed the comment regarding design capacity limits in another response above.

2.4 Department Responses to Specific Comments from MAELC / Sierra Club as Provided During the Public Hearing on August 18, 2004

Comment: *Comment 6) Why are there are no CO, PM 10, VOC & Sulfuric Acid Mist emissions limits for Boiler 4?*

Premcor's Response: No further comment, except as set forth above in Section 2.0, Comment 2, regarding capacity limits.

DNREC Response: No response is necessary. DNREC has addressed the comment regarding design capacity limits in another response above.

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